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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,879	01/18/2001	Brian Keith Schmidt	0007056-0058/P5318/BBC	9293
32291	7590	07/01/2005	EXAMINER	
MARTINE PENILLA & GENCARELLA, LLP 710 LAKEWAY DRIVE SUITE 200 SUNNYVALE, CA 94085			NGUYEN, QUANG N	
			ART UNIT	PAPER NUMBER
			2141	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/765,879	SCHMIDT, BRIAN KEITH	
	Examiner	Art Unit	
	Quang N Nguyen	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,7-10,14-17 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,7-10,14-17 and 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/23/2005 has been entered.

Claims 1, 8 and 15 have been amended. Claims 25 and 26 have been added as new claims. Claims 1-3, 7-10, 14-17 and 21-26 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 3, 7, 8, 10, 14, 15, 17 and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hipp (US 6,848,106), in view of VMware (Technical White Paper – February 1999).**

4. As to claims 1 and 26, Hipp teaches a method for providing a virtual namespace for a compute capsule, comprising:

assigning a virtual token to a resource (*assigning a virtual RID to a system resource*) within said compute capsule, said resource being of an underlying machine and capable of being named by said compute capsule (*if a resource is marked for copy-on-write, then a reference to the original underlying object is kept*) (Hipp, C9:L34 – C10:L48);

interposing a name translator (*the virtual resource translation table 502*) between said resource and said compute capsule (Hipp, C10: L43-47 and C11: L8-14);

binding said resource to said virtual token (*the virtual resource translation table 502 contains the mapping of the resource semaphore and the virtual RID*) (Hipp, C11: L15-29); and

translating said virtual token into said resource using said name translator (*translating the virtual RID into system resource using the virtual RID translation unit*), if the compute capsule names said resource (Hipp, C11: L30-42).

However, Hipp does not explicitly teach said compute capsule being configured to provide an encapsulated form that is independent of an environment of a host system, e.g., independent of configuration settings of a host system.

In a related art, VMware teaches VMware Virtual Platform, a thin software layer that allows virtual machines with multiple operating system environments to work in concert with each other sharing files and devices, wherein VMware Virtual Platform can encapsulate a virtual machine and enable it to be moved freely among different physical

machines (*i.e., being independent of environment/configuration settings of a host system*) (VMware, page 2, paragraphs 3-4).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Hipp and VMware to configure the compute capsule to provide an encapsulated form that is independent of an environment of a host system since such methods were conventionally employed in the art to allow the system to support the integration of multiple environments so that these environments to perform like multiple applications on a single computer.

5. As to claim 3, Hipp-VMware teaches the method of claim 1 wherein said virtual token is only identifiable from within said compute capsule (*only the virtual RID is visible to the application*) (Hipp, C9:L66 – C10:L16).

6. As to claim 7, Hipp-VMware teaches the method of claim 1 further comprising: controlling access to said active computing environment (*for every resource included in the snapshot virtual template, rules for the resource and access type are looked up, i.e., controlling access via an access list or rules list*) (Hipp, C9: L24-29).

7. Claims 8, 10, 14, 15, 17 and 21 are corresponding virtual namespace and computer program product claims of method claims 1, 3 and 10; therefore, they are rejected under the same rationale.

8. As to claims 22-23, Hipp-VMware teaches the method of claim 1, wherein said compute capsule encapsulates an active computing environment including one or more processes and state information (*an application snapshot may consist of multiple processes and multiple threads and include shares resources in use by a process*) that allows said compute capsule to be suspended and revived on a binary compatible machine (*snapshot virtual templates are node-independent*) (Hipp, C3: L45-58).

9. As to claim 24, Hipp-VMware teaches the method of claim 1, wherein said resource is defined by one or more of a file, a processor, a memory, and an attached device (*data is loosely defined to mean any system resource such as memory, files, sockets, handles, etc.*) (Hipp, C6: L58-65 and VMware, pages 6-7, section Resource Management).

10. As to claim 25, Hipp-VMware teaches the method of claim 1, wherein said compute capsule is configured to communicate with processes outside said compute capsule through Internet sockets and globally shared files (*VMware Virtual Platform emulates an Ethernet card to allow virtual machines to share files, printers and machines connected to the LAN or the Internet*) (VMware, page 6, paragraph 6).

11. **Claims 2, 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hipp-VMware, in view of Howes et al. (US 6,324,177), herein after referred as Howes.**

12. As to claim 2, Hipp-VMware teaches the method of claim 1, but does not explicitly teach said virtual resource translation table 502 is a hash table.

In a related art, Howes teaches a process of creating a Bind ID object, wherein a client IP address (*e.g., an object ID such as an application ID, thread ID, process ID, connection ID, etc.*) is stored in the assigned Bind ID object (*i.e., the assigned virtual token*) then the Bind ID object is added to the Bind ID object hash table that is used to search through the Bind ID objects to specify an instance of a virtual machine to handle client connections (*to translate/map the virtual token into the corresponding resources*) (Howes, C9: L40-63).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Hipp-VMware and Howes to include a hash table for translating/mapping virtual tokens/IDs into resources since such methods were conventionally employed in the art to allow the system to facilitate searching in order to translate/map the virtual tokens (Bind IDs) into corresponding resources with great efficiency and speed.

13. Claims 9 and 16 are corresponding virtual namespace and computer program product claims of method claim 2; therefore, they are rejected under the same rationale.

14. Applicant's arguments as well as request for reconsideration filed on 05/23/2005 have been fully considered but they are moot in view of the new ground(s) of rejection.

15. Further references of interest are cited on Form PTO-892, which is an attachment to this office action.

16. A shortened statutory period for reply to this action is set to expire THREE (3) months from the mailing date of this communication. See 37 CFR 1.134.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER